

the extension of the "pure woods" system, and results fully justify the continuance of this popular continental mode of planting. Where larch have been planted "pure," evidence is abundant of the cessation of the struggle for existence by the smaller trees, which are unable to exist under the canopy formed by the dominating specimens.

Thinning operations, to any extent, even in our most advanced southern plantation, will not require to be introduced for at least five or six years, but from that period onward the work of under-planting with shade-enduring varieties may be conducted.

ENEMIES OF OUR PLANTATIONS.

In the animal world rodents, such as rabbits and hares, are proving to be the most persistent and inveterate that our plantations have to contend with. All recognised schemes for their eradication are brought into effect, but it is an intensely difficult problem to keep newly acquired reserves quite free from rabbits, particularly when dry seasons render the boundary river ineffective as a barrier to the animals.

Several specimens of diseased *Picea sitchensis* were received from the Canterbury Province, and show unmistakable signs of damage being caused by the red mite (*Byrobia pratensis*), which is often most destructive to members of the spruce family. No notification of the presence of this insect in any of the State plantations has, however, reached me.

The grubs (*Odontria* Z.) have again been conspicuous for a short period in the nurseries, but the method now adopted of ridding the ground of this destructive bark-eating larvæ, by intense cultivation, is proving effective, and future losses amongst our lined-out trees should be considerably reduced.

PREVENTION OF FIRES.

Additional measures for the prevention of fire were brought into practice during the year, and it is gratifying to be able to report the entire absence of any conflagration at the southern stations. On each Sunday and holiday during the summer months an employee was selected to patrol the plantation, and be ready to act immediately in case of any outbreak of fire. New fire and trespass notices were mounted on boards and erected in conspicuous places at each of the plantations, and extension "breaks" were marked off and ploughed where desirable.

LIBRARY ON FORESTRY LITERATURE.

Arrangements are being made to formulate a library of advanced literature on forestry, for the use of officers connected with the Department. Success in creating forests can only, in my opinion, be achieved by unanimity of object amongst those in charge of stations, who at the present moment differ somewhat in their opinions regarding the labour essential to bring about desired results. No particular scheme of imparting general instruction has yet been decided upon beyond the decision to issue books to the various officers, who, on perusal of any selected subject, will freely comment on principles advocated by the author, and forward the composition for remarks. Needless to state that interchange of ideas will prove of immense benefit to all concerned, and should facilitate the supervision of the various stations.

PROPOSALS FOR 1910-11.

Conical Hills Plantation.—Preparations are now well in hand for the planting of an approximate 1,600,000 trees at this station. These will be supplied by the Tapanui Nursery, and there is a probability of the number being supplemented by nearly 400,000 from Central Otago.

The erection of 120 chains of wire-netting fence is contemplated; this block-planting system is indispensable where rabbits have to be contended with, although no further expenditure in this direction will be required to complete the planting of the whole area available. Pruning and general maintenance on No. 1 area will be undertaken by a gang of three men.

Dusky Hill Plantation.—The three unused huts are now being drawn together, and will be converted into a dwellinghouse for the foreman, whose constant presence on the reserve will render the employment of caretakers unnecessary. Only two men will be retained here, and their time will be fully occupied in pruning and general work.

Gimmerburn Plantation.—A horseman will be kept at this station, whose duties, besides attending to plantation requirements, will include the growing of horse-feed for transference to other South Island nurseries.

Hanmer Springs Plantation.—1,390,000 trees are sufficiently advanced at the local nursery for permanent planting, and every effort will be made to deal successfully with these by both prison and free labour. An adjoining area of some 1,080 acres has been acquired for extension purposes, and, as the bulk of the planting will be confined to this block, fencing operations will be commenced immediately. General maintenance, in the form of pruning, &c., will also be carried on here where necessary.

PERSONAL.

Able assistance has been rendered willingly by the staff, who have carried out their duties conscientiously, and the thanks of the Department are also due to the warden in charge and officers of the Prisons Department at Hanmer Springs.

Mr. T. B. Curle, Nurseryman in Charge, and Mr. R. Leask, Assistant Forester, both of Hanmer Springs, resigned during the year, and were succeeded by Mr. W. G. Morrison, of Conical Hills Plantation, and Mr. A. J. Boydell, of Hanmer Springs Nursery.

R. G. ROBINSON,
Superintending Nurseryman, South Island.